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10/608,264	06/30/2003	Sandrine Decoster	239284US0	1398
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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ARNOLD, ERNST V	
			ART UNIT 1616	PAPER NUMBER
			NOTIFICATION DATE 05/16/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/608,264

Applicant(s)

DECOSTER ET AL.

Examiner

Ernst V. Arnold

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 34-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 34-36 have been withdrawn from consideration as being drawn to non-elected subject matter. Claims 1-33 are under examination as they read on the elected subject matter. Applicant further elected quaternium-80, cetyltrimethylammonium chloride, polyquaternium-10, polyquaternium-44 and hydroxypropylcellulose as components in the composition.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-33 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-35, and 37-46

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of copending Application No. 10/606,786 in view of Jacquet et al. (US 4,390,522).

Instant claim 1 is drawn to a composition comprising: water; at least one silicone comprising ammonium groups; at least one cationic surfactant; at least two different cationic polymers; and at least one nonionic and nonassociative thickening polymer.

Copending claim 1 is drawn to a composition comprising at least one silicone with quaternary ammonium groups and at least one liquid fatty alcohol further comprising at least one cationic surfactant (instant claim 12); further comprising at least two different cationic polymers (instant claim 19); further comprising at least one nonionic thickening agent (instant claims 29 and 30); and wherein the cosmetically acceptable medium comprises water. The difference between the compositions is the liquid fatty alcohol in the copending composition. However, Jacquet et al. teach the addition of 0-25 weight percent of a fatty alcohol such as oleyl, lauryl, myristyl, cetyl, stearyl, and isostearyl alcohols to cationic polymer cosmetic compositions for application to the hair (Claims 1, 11 and 12). One of ordinary skill in the art would have added a fatty alcohol such as isostearyl alcohol to the composition of the instant application and produced the copending invention with a reasonable expectation of success. One of ordinary skill in the art would have recognized the obvious variation of the instant invention over the copending application especially in view of the fact that the same silicone polymers are being claimed and the comprising language of the applications allows for the inclusion of other materials.

This is a provisional obviousness-type double patenting rejection.

Response to arguments:

Applicant did not traverse the rejection and the Examiner maintains the rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janchitraponvej et al. (US 5,556,615) in view of Jahedshoar et al. (WO 01/28506) and Dupuis (US 6,214,326) and Jacquet et al. (US 4,390,522).

Please note that the Examiner is relying on WO 01/28506 for the rejection and using the English language equivalent US 6,602,494 for translation.

Applicant claims a composition comprising: water; at least one silicone comprising ammonium groups; at least one cationic surfactant; at least two different cationic polymers; and at least one nonionic and nonassociative thickening polymer

wherein quaternium-80, cetyltrimethylammonium chloride, polyquaternium-10, polyquaternium-44 and hydroxypropylcellulose are components in the composition.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Janchitraponvej et al. teach hair conditioning compositions for treating hair comprising a 0.1% to 5% silicone compound such a Quaternium 80, and provide an example with a silicone compound, 1.5% quaternary ammonium compound (a cationic surfactant), nonionic surfactant, alkylene glycols, 1.15% thickener (hydroxyethylcellulose), cyclomethicone (additional conditioner), protein-based conditioner, coupling surfactant, fragrance and water (Abstract; column 15, example 5 and claims 1, 8 and 9). Janchitraponvej et al. teach quaternary ammonium compounds for inclusion in the composition (Column 12, lines 25-59) and nonionic surfactants such as polyoxyethylene (20) oleyl ether and N-alkylated-2-pyrrolidones (Column 13, lines 46-67). Janchitraponvej et al. teach quaternary ammonium compounds having one or two long chain alkyl groups containing from 8 to about 18 carbon atoms and the remaining two to three substitutes of the quaternary nitrogen of the quaternary ammonium compound can be short chain alkyl such as methyl and provide a number of examples of cetyl ammonium chlorides (Column 12, lines 25-59). Janchitraponvej et al. teach that an oil-soluble water dispersible quaternary ammonium compound either alone or in combination with a water-soluble quaternary ammonium compound can be used in the composition (Column 12, lines 40-44). Janchitraponvej et al. teach the

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addition of an optional nonionic thickener such as hydroxypropylcellulose, guar gum, and gum Arabic, for example, at 0% to about 3% by weight (Column 14, lines 1-10). Janchitraponvej et al. teach that the hair is rinsed with water after contacting with the conditioning composition (Claims 14 and 15).

Jahedshoar et al. teaches cetyltrimethylammonium chloride, polyquaternium-10 and polyquaternium-44 in hair conditioner compositions (Column 10, examples 1 and 2 and Column 11, example 3 and 6). Jahedshoar et al. also teaches Quaternium 80 as a suitable silicone polymer with two terminal quaternary ammonium groups for use in the composition (Column 8, lines 11-37). Jahedshoar et al. teach cetyltrimethylammonium chloride as a cationic surfactant (Column 4, lines 12-28). Jahedshoar et al. teach cationic polymers for use in the composition including pyridinium and imidazolium or quaternary pyrrolidones, copolymers of polyvinylpyrrolidone, for example (Column 5, line 10 through column 8, line 37).

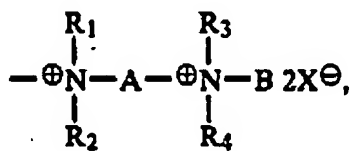
Dupuis teaches cosmetic compositions for treating keratinous material containing cationic polymers and acrylic terpolymers (Abstract). Dupuis teaches that the thickening and/or gelling polymers combined with cationic polymers produces cosmetic formulations which are not pasty or greasy and which give hair good properties of softness, feel and easy disentangling (Column 1, lines 36-44). The thickening and/or gelling polymers are terpolymers with a) methacrylic acid or acrylic acid; b) methacrylates, acrylates such as methyl, ethyl and butyl acrylate, and nonionic surfactants, and c) nonionic urethane monomer (Column 1, line 59 bridging Column 2, lines 63). Dupuis teaches cationic polymers of silicone, polyamines, polyaminoamides

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and quaternary polyammonium types as known products (Column 3, lines 52-55).

Dupuis teaches quaternized vinyl pyrrolidone dialkylaminoalkyl acrylate or methacrylate copolymers, cellulose derivatives containing quaternary ammonium groups, dimethyldiallylammonium salts of hydroxypropylcellulose, cationic polysaccharides and in particular guar gums, polymers consisting of piperazinyl units, water soluble polyaminoamides, methyldiallylamne or dimethyldiallyl-ammonium cyclopolymers, polyquaternary ammonium polymers of formula VIII found in column 10, lines 25-30, homopolymers or copolymers derived from acrylic or methacrylic acid, quaternary vinylpyrrolidone and vinyl-imidazole polymers, polyamines, methacryloyloxyethyltrimethylammonium chloride crosslinked polymers, condensates of polyamines and epichlorohydrin, and chitin derivatives, for example (Column 3, line 56 through column 12, line 20 and claims 1 and 11). Dupuis teaches that when the composition is a leave-in type it comprises one or more of quaternized or non-quaternized vinylpyrrolidone/dialkylaminoalkyl acrylate or methacrylate copolymers or quaternary vinylpyrrolidone or vinylimidazole polymers (Claim 12). Dupuis teaches the composition as a rinse-out or leave in hair product (Claim 18).

Jacquet et al. teach the diquaternary ammonium cationic polymer, which can be present from 0.1% to 5% in shampoos (Column 8, lines 45-48).



Jacquet et al. teach emulsifiers such as oleyl alcohol polyoxyethylenated with 10 to 30 moles of ethylene oxide, for example (Column 7, lines 24-27). Jacquet et al. teach nonionic detergents such as ethers of polyethoxylated fatty alcohols (Column 7, lines 65-67). Jacquet et al. teach the further addition of cosmetic resins such as polyvinylpyrrolidone and copolymers of polyvinylpyrrolidone (Column 8, lines 54-61). Jacquet et al. teach cationic detergents such as long-chain quaternary ammoniums, alkylpyridinium salts, polyether fatty amines, or imidazoline derivatives (Column 7, lines 62-64). Jacquet et al. teach lauryltrimethylammonium chloride as a cationic ammonium compound which renders obvious other alkyltrimethylammonium salts present in the composition from about 5% to about 10% by weight of the composition in total (Column 12, lines 23-25 and 49). Jacquet et al. teach the addition of perfumes, dyes, thickening agents, foam stabilizing agents and softening agents (Column 8, lines 40-44).

**Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)**

1. Janchitraponvej et al. do not expressly teach the addition of cetyltrimethylammonium chloride, polyquaternium-10, and polyquaternium-44 to the hair care composition.
2. Janchitraponvej et al. do not expressly teach the addition of the quaternary ammonium salts of instant claim 10.
3. Janchitraponvej et al. do not expressly teach the addition of cationic polymers of instant claims 14-20.

4. Janchitraponvej et al. do not expressly teach the addition of a thickening agent comprising vinylpyrrolidone homopolymer.

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

1. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add cetyltrimethylammonium chloride, polyquaternium-10, and polyquaternium-44 to the composition Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Janchitraponvej et al. teach ammonium compounds, which embrace cetyltrimethylammonium chloride, and Jahedshoar et al. teach that polyquaternium-10, and polyquaternium-44 are useful in hair conditioner compositions. "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

2. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add quaternary ammonium salt of imidazoline to the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because: "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Dupuis teaches quaternary vinylimidazole polymers which renders obvious the quaternary ammonium salt of imidazoline to one of ordinary skill in the art.

3. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the cationic polymers taught by Dupuis and Jacquet et al. in the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because: "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). It is the Examiner's position that the polymer renders obvious the quaternary monomer.

4. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the thickening agents taught by Dupuis and suggested by Vatter et al. in the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Dupuis teaches that the thickening and/or gelling polymers combined with cationic polymers produces cosmetic formulations which are not pasty or greasy and which give hair good properties of softness, feel and easy disentangling (Column 1, lines 36-44). Vatter et al. teach that polyvinylpyrrolidone is a conventional thickening agent and it is the Examiner's position that one of ordinary skill in the art would immediately envisage the homopolymer of polyvinylpyrrolidone as a thickening agent.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976).

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to arguments:

Applicant submitted a declaration under 37 C.F.R. 1.132 supposedly demonstrating unexpected and surprising properties of the invention compositions.

Three nearly identical compositions were compared: the first contained the two cationic polymers (polyquaternium-10 and polyquaternium-44) of the invention the second contained a single cationic polymer (polyquaternium-44) and the third contained a single cationic polymer (polyquaternium-10). Direct comparisons were made by washing the hair of six testers and treating ½ the head of each tester with the composition of the invention and the other half of the head with the comparative composition.

Compositions were judged on their feeling of smoothness or on the “melting sensation” and suppleness of the hair. Applicant asserts that the “vast difference in properties between the Invention Composition and the Comparative Compositions was surprising and unexpected given the similarity of the compositions.” The Examiner cannot agree. First, the data was presented on a subjective scale. It is unknown what a score of excellent might be or a score of extremely poor. There is no standard to judge the data. Secondly, because the Examiner cannot determine the significance of the differences in the results, which are only 0.2-0.4 units, it appears to the Examiner that combination in the Inventive composition is merely additive in nature and not surprising. Simply add another cationic polymer and the score would be higher yet; probably in the range of 0.2-0.4 based on Applicant’s subjective scale. In conclusion, the Declaration is deemed insufficient to overcome the 35 USC 103(a) rejection.

Conclusion

No claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

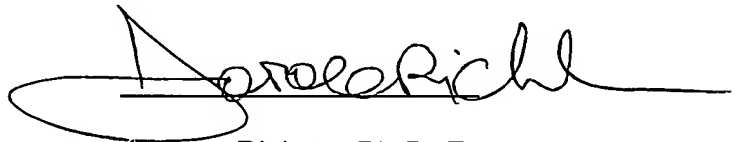
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F (6:15 am-3:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ernst Arnold
Patent Examiner
Technology Center 1600
Art Unit 1616

A handwritten signature in black ink, appearing to read "Johann Richter", with a large, stylized loop at the beginning.

Johann Richter, Ph.D. Esq.
Supervisory Patent Examiner
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